WSDOT Market Analysis

September, 2007

This market analysis is based on a review of published information including the following sources: Associated General Contractors (AGC); Bloomberg; Energy Information Administration (EIA), Engineering News Record (ENR); The Federal Highway Administration (FHWA); Forbes; Reed Construction Data and The Wall Street Journal

• **Asphalt** prices could rise further as crude oil reaches record highs. As the cost of crude oil has increased, refiners have developed ways to more efficiently produce high-end products like gasoline. Additionally high crude oil prices are pushing refiners to make a profit on asphalt, which in the past was viewed as a non-lucrative by-product of the refining process.

Strong gains in crude oil prices are keeping the cost of paving asphalt above last year's record levels. In late July, futures prices for light crude oil for September delivery on the New York Mercantile Exchange topped \$70 a barrel. These higher oil prices have checked a brief decline in asphalt paving prices at the beginning of the year. The rebound in asphalt paving prices brought ENR's 20-city average price 2% above August 2006's level, when it posted a 43% annual increase. ENR, "Construction Economics," August 6, 2007.

"Until recently, asphalt had been produced largely as a by-product of other refinery processes rather than as a source of profits in its own right. Now, refineries are upgrading their processes to produce larger amounts of higher grade, profitable output from each unit of crude oil input, resulting in a decrease in the production of by-products, including asphalt. This is causing the price of asphalt to increase to justify its production by refineries instead of other profitable output." FHWA, "Growth in Highway Construction and Maintenance Costs," September 26, 2007.

Concrete prices traditionally increase during the spring and summer, fueled by demand. Concrete prices are now being fueled by crude oil prices as well as construction activity. Prices are expected to keep rising, though they may rise at a slower pace in 2008 than in 2007.

"The slump in housing has had little impact on concrete prices. In July, they rose for the ninth consecutive month and are now 7% above a year ago. This follows annual increases of 6% in both 2006 and 2005. After jumping 3.5% during the first quarter, Portland cement prices continue to rise. This month's 0.4% increase helped keep cement prices more than 8% above a year ago." ENR, "Construction Economics," July 2, 2007.

"The price of cement tracks the growth in oil prices, as the production of cement is a highly fuel-intensive process. Not only must the kilns used to produce the intermediate outputs be heated to extreme temperatures, but considerable power is required to grind

those intermediate outputs into powder. The near-term forecast of the Energy Information Administration and major energy forecasters we interviewed is for the price of oil to remain elevated, keeping the price of cement high." FHWA, "Growth in Highway Construction and Maintenance Costs," September 26, 2007.

Fuel prices shot up in the third quarter of 2007. While price increases during the second quarter were largely caused by refinery issues, crude oil prices rose during the third quarter of 2007 on speculations that future supply could not meet future demand. For the remainder of 2007, OPEC production will remain a focus with Saudi Arabian production increases key to lowering overall crude oil prices. Unless demand significantly decreases, prices will likely remain high and crude oil is expected to stay above \$70 a barrel throughout 2008.

"Crude oil rose to a record close of \$78.23 a barrel in New York on speculation that OPEC's agreement to increase production by 500,000 barrels a day will be insufficient to meet strengthening demand." Bloomberg, "Crude oil rises to record close on signs OPEC won't meet demand," September 11, 2007 – Mark Shenk.

"On October 16, 2007, the near-month futures contract price for West Texas Intermediate (WTI), the U.S. benchmark for crude oil, set an all-time nominal record of \$87.61 per barrel. This was the culmination of nearly nine months of an upward trend that saw WTI crude oil prices rise by \$35.68 per barrel from its yearly low of \$50.48 per barrel on January 18th." EIA, "This Week in Petroleum," October 17, 2007.

o **Lumber and plywood** prices could experience further moderate declines or remain level as supplies continue to be scaled back. Reports of mill shutdowns were widespread during the second quarter and the trend continued through the third quarter with reports of firms temporarily shutting down or scaling back production to bring supply in line with demand.

"Pope & Talbot Inc. said Tuesday it is shutting down two Canadian saw mills for two weeks, due to falling softwood lumber prices prompted by the continued housing market slowdown. "The poor softwood lumber market has led to a situation where it is not profitable for us to run at normal capacity," Chief Executive Harold Stanton said in a statement." Forbes, "Pope & Talbot Temporarily Shutting Mills," August 14, 2007.

"Homebuilding seems mired in a deep trough that will maintain downward pressure on prices for lumber and plywood and gypsum products, and will ease demand for other materials used in both residential and nonresidential construction. Tighter credit standards on the part of lenders may trim the number of new office, retail and hotel projects that are started, which will also help bring supply and demand for construction materials into balance." AGC, "Construction Inflation Alert," October, 2007.

• **Steel** prices are expected to continue rising in the short term as the industry continues consolidating and demand outpaces supply.

"Mittal Steel Co. and Arcelor SA, which are combining to form the world's biggest steelmaker by sales, said they could raise steel prices before the end of the year as they take some production off line. Last week, U.S. Steel also said it expected stronger sales and higher prices through the end of the year." Wall Street Journal, "Higher Steel Prices Expected As Inventories Start to Drop," August 2, 2007 – Robert Guy Matthews and Anne Jolis.

"The steel price outlook for contractors is again ominous as the short-term inventory cycle in the world steel market moves into the "too little" phase accompanied by rapidly rising steel demand in all of the major consuming countries. The pauses and pullbacks in many commodity prices early in 2007 are now reversing as US factory production and construction activity resumes rising in the second half of the year and through 2008. Prices will increase most for low-volume specialty products, such as stainless or structural shapes." Reed Construction Data, "Steel Prices Set to Head Higher," August 2007 – James Haughey.

o **Highway Materials & Construction** prices will keep rising, but not as rapidly as they did in 2006.

"The PPI for highway and street construction inputs soared 43 percent from December 2003 through August 2007; the index for "other heavy construction," 36 percent. Both of those types rely more than building construction does on diesel fuel, steel, concrete and – in the case of highways – asphalt. All four of those indexes rose more rapidly than the overall construction inputs PPI." AGC, "Construction Inflation Alert," October 2007.

"Highway construction and maintenance costs nationwide grew dramatically from 2003 through 2006, substantially reducing the purchasing power of highway funds. [...] Since these increases are the result of structural economic changes, the costs of these commodities can be expected to remain elevated, and possibly continue in the near term." FHWA, "Growth in Highway Construction and Maintenance Costs," September 26, 2007.

• **Labor** prices are rising in the 5% annual range after recent negotiations in the Puget Sound area. This trend is expected to continue.

"It is likely that average hourly earnings in construction will rise at an annual rate of 5-5.5 percent during the next several months. If residential construction revives in the second half of 2008, specialty trade workers will be at even more of a premium." AGC, "Construction Inflation Alert," October 2007.